



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/767,610

01/29/2004

David K. Williams

5196

7590

06/16/2006

David K. Williams

#19

12290 Highway 181 South
San Antonio, TX 78223

EXAMINER

GORMAN, DARREN W

ART UNIT

PAPER NUMBER

3752

DATE MAILED: 06/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/767,610	Applicant(s) WILLIAMS, DAVID K.	
	Examiner Darren W. Gorman	Art Unit 3752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-9,11,13-18 and 21-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-9,11,13-18 and 21-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 28, 2006 has been entered.

Minor Claim Suggestions By Examiner

2. The following change(s) are recommended to improve clarity of the claims. The claims have been examined on the merits including the suggested changes below.

- Regarding claim 1, on line 4, "second fluid" should be changed to --second liquid-- in order to be consistent with the claim language within the body of the claim.
- Further, regarding claims 1, on line 11, "first fluid" should be changed to --first liquid-- in order to be consistent with the claim language within the body of the claim.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Art Unit: 3752

4. Claims 17, 18 and 23-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 17, “the adapter assembly” in claim 17 does not have proper antecedent basis. Amending claim 17 to be dependent on either of claims 15 or 16 would overcome this rejection. It should be noted that Applicant indicated on page 7 of the “Remarks” section of the response filed March 28, 2006, that claim 17 has been amended in light of this rejection, however claim 17 has not been amended, therefore the rejection remains outstanding.

Regarding claim 18, the recitation of a “second pump” is unclear, since there is no positive recitation of a “first pump” within the body of the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 2, 4, 5, 7, 8, 18, 21, 24 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Petty, USPN 5,671,889.

Regarding apparatus claims 1, 2, 4, 5, 7, 8 and 21, Petty shows a spraying system comprising a first pump (32) and a second pump (33), a storage tank (51), and a wand assembly (13) coupled to the first pump and the second pump, wherein the wand assembly produces a spray of a first liquid in a first direction that is generally longitudinal relative to the wand

Art Unit: 3752

assembly, and wherein the wand assembly produces a spray of a second liquid in a second direction that is directed transversely towards the spray of the first liquid (see Figure 6; and column 4, lines 46-48), such that at least a portion of the spray of the second liquid is entrained in the spray of the first liquid and thereby re-directed to travel in the first direction. Petty further shows an engine (25) drivingly coupled to the first pump (see column 3, lines 33-37). Further, Petty shows the wand assembly (see Figures 4 and 6) comprising a first wand (301) in fluid communication with the first pump and a second wand (300) secured to the first wand by a bracket (99), the second wand being in fluid communication with the second pump, wherein the first wand controls a flow of the first liquid from the first pump to the first wand (see Figure 4; and column 3, lines 31-37) and the second wand includes a control for controlling a flow of the second liquid from the second pump to the second wand, wherein the control for controlling flow of the second liquid comprises an isolation valve (270) (see Figure 4; and column 7, lines 24-27). Petty also shows an adapter assembly comprising adapter fittings (98) removably secured to the first wand and the second wand (see Figure 6), wherein the adapter assembly includes a first orifice (250) and a second orifice (19), wherein the flow of second liquid is directed through the first orifice to produce the second spray that is directed transversely toward the first spray, the first spray being produced by the second orifice.

Regarding method claims 18, 24 and 25 the “method of modifying” steps recited are anticipated by the system shown by Petty, as discussed above.

As to the recitations in claim 18 of the “first pressure washing wand” and the “second pressure washing wand”, there is nothing that precludes the spraying system shown by Petty

Art Unit: 3752

from being used as a pressure washer, since each of the essential claimed structural limitations of applicant's pressure washing system is anticipated by the disclosure of Petty, and one having ordinary skill in the art would recognize that the choice of liquids to be sprayed from the system of Petty would be nothing more than selections based on intended use of the apparatus.

Further, regarding the recitation, "operable to produce a high-pressure spray of a first liquid" in the preamble of claim 18, the disclosure of Petty expressly discusses a pressure regulating system for regulating the pressure of the fluid being pumped by the first and second pumps and hence the pressure of the liquid being sprayed through the first and second orifices, and that the pressure regulating system can be adjusted by the operator to control the output pressure of the first and second liquids, such adjustments being made based on several factors including, for example, nozzle size, fluid viscosity, air temperature, and characteristics of the fluids being sprayed (see column 5, lines 3-9).

Still further, the "pressure washing system" and "method of modifying a pressure washing system" recitations of the preambles of claims 1 and 18, respectively, have not been given patentable weight because a preamble is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. Again, there is nothing that precludes the spraying system shown by Petty from being used as a pressure washer, since each of the essential claimed structural limitations of applicant's pressure washing system is anticipated by the disclosure of Petty, and one having ordinary skill in the art would recognize that the choice of liquids to be sprayed from the system of Petty would be nothing more than selections based on intended use of the apparatus.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 9, 11, 13, 15-17, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petty.

As to claims 9, 11, 13, 15, 17 and 22, Petty shows a spraying system comprising: a first pump (32); a second pump (33); a storage tank (51) operable to store a liquid, wherein the second pump is operable to pump the liquid from the storage tank; and a wand assembly (13) in fluid communication with the storage tank and coupled to the first pump and the second pump, wherein the wand assembly produces a spray of another liquid and a spray of the liquid from the storage tank that is directed towards the spray of the another liquid (see column 4, lines 46-48) to entrain at least a portion of the liquid from the storage tank in the spray of the another liquid. Further, Petty shows the wand assembly (see Figures 4 and 6) comprising a first wand (301) in fluid communication with the first pump and a second wand (300) secured to the first wand by a bracket (99), the second wand being in fluid communication with the second pump, wherein the first wand controls a flow of the another liquid from the first pump to the first wand (see Figure 4; and column 3, lines 31-37) and the second wand includes a control for controlling a flow of the storage tank liquid from the second pump to the second wand, wherein the control for controlling flow of the storage tank liquid comprises an isolation valve (270) (see Figure 4; and

Art Unit: 3752

column 7, lines 24-27). Petty also shows an adapter assembly comprising adapter fittings (98) removably secured to the first wand and the second wand (see Figure 6), wherein the adapter assembly includes a first orifice (250) and a second orifice (19), wherein the flow of the storage tank liquid is directed through the first orifice to produce the spray that is directed toward the spray of the another liquid, the spray of the another liquid being produced by the second orifice.

However, in the system shown by Petty, the second pump for pumping the liquid from the storage tank is driven by a hydraulic system (see column 4, lines 6-39), rather than being powered electrically by DC (battery) power.

It is old and well known in the art for liquid pumps to be driven by either hydraulic or electric (AC or DC) power. In other words, at the time the invention was made, the use of either was recognized in the art as being equivalent. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to replace a DC (battery) power system for the hydraulic system disclosed by Petty for powering the second liquid pump, since the selection of either of these known equivalents to power a liquid pump would be within the level of ordinary skill in the art. It should also be noted that Applicant has not disclosed that using DC power, in lieu of other power sources, solves any stated problem or is for any particular purpose other than to power the pump for pumping the liquid from the storage tank.

As to the, "kit for modifying a pressure washing system" recitation of the preamble, such has not been given patentable weight because a preamble is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause. Further, there is nothing that precludes the spraying system shown by Petty from being

Art Unit: 3752

used as a pressure washer, since each of the essential claimed structural limitations of applicant's pressure washing system is anticipated by the disclosure of Petty, and one having ordinary skill in the art would recognize that the choice of liquids to be sprayed from the system of Petty would be nothing more than selections based on intended use of the apparatus.

Regarding the recitations of producing "high-pressure spray" and the recitation of a "low-pressure wand", the disclosure of Petty expressly discusses a pressure regulating system for regulating the pressure of the fluid being pumped by the first and second pumps and hence the pressure of the liquid being sprayed through the first and second orifices, and that the pressure regulating system can be adjusted by the operator to control the output pressure of the first and second liquids, such adjustments being made based on several factors including, for example, nozzle size, fluid viscosity, air temperature, and characteristics of the fluids being sprayed (see column 5, lines 3-9).

As to claim 16, Petty shows or renders obvious all of the claimed limitations as recited in claim 15, however the connection between the adapter fitting (98) and the first wand (301) is not expressly disclosed as a "quick coupling".

It is old and well known in the art to use a "quick coupling" connector for connecting two fluid handling elements together, such that a reliable, fluid-tight connection is made and assembly or disassembly is quick and easy. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to include a quick coupling connector for connecting the adapter fitting to the first wand, since quick coupling connectors are old and

Art Unit: 3752

well known in the art for providing reliable, fluid-tight connections, while allowing for easy assembly or disassembly.

As to claim 23, Petty teaches all of the claimed limitations as recited in claim 18, however in the system shown by Petty, the second pump is driven by a hydraulic system (see column 4, lines 6-39), rather than being powered electrically by battery power.

It is old and well known in the art for liquid pumps to be driven by either hydraulic or electric (AC or DC) power. In other words, at the time the invention was made, the use of either was recognized in the art as being equivalent. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to replace a battery power system for the hydraulic system disclosed by Petty for powering the second liquid pump, since the selection of either of these known equivalents to power a liquid pump would be within the level of ordinary skill in the art. It should also be noted that Applicant has not disclosed that using battery power, in lieu of other power sources, solves any stated problem or is for any particular purpose other than to power the second pump for pumping the liquid from the storage tank.

9. Claims 6 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Petty, in view of Hewett, USPN 3,997,114.

Petty shows all of the claimed limitations as set forth in claims 5 and 13, however Petty does not expressly teach the second wand as including a throttle valve (149) for throttling the flow of the second liquid through the second wand.

Hewett shows a spraying system (see Figure 10) having two wands (B, 141; and C, 148) connected in parallel for simultaneously spraying two separately supplied liquids such that the liquids co-mingle at a point beyond the outlets of each wand, wherein at least one wand includes a throttle valve (149) which permits fine metering of a liquid being delivered to its respective outlet, such that a user may adjust the quantity of liquid to be sprayed (see column 8, lines 7-10).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include a throttle valve, as taught by Hewett, with the second wand shown by Petty, in order to finely meter the quantity of the second liquid flowing through the second wand to the first orifice, as desired by the user with a specific result in mind.

Response to Arguments

10. Applicant's arguments filed on pages 7 and 8 of the "Remarks" section of the response filed March 28, 2006 with respect to the prior art of Petty (US Patent No. 5,671,889) as not anticipating the instant claims have been fully considered but they are not persuasive. Applicant essentially contends that the spray nozzles shown by Petty are "not adapted so that one of the sprays produced by either nozzle 19 or 250 is entrained in the other spray". Further, Applicant contends that, "neither nozzle 19 nor nozzle 250 is adapted to produce a spray to redirect the spray from the other nozzle to flow in the direction of the spray from the other spray nozzle". It is the Examiner's position that, due to the angular orientation of the spray nozzles 19 and 250, as shown in Figure 6, at least a portion of the liquid (i.e. the second liquid) sprayed from nozzle 250 (i.e. the first orifice) would be entrained in the spray of the liquid (i.e. the first liquid) sprayed from nozzle (19) (i.e. the second orifice) and thereby be re-directed to travel in the direction of

Art Unit: 3752

the first liquid spray. As disclosed in column 8, lines 16-17 of Petty, with reference to Figure 6, the spray from the nozzles mix downstream of the orifices to produce a fan of 40°. As such, it is inherent that at least a portion of the liquid sprayed from nozzle 250 be re-directed to travel in the direction of the liquid spray from nozzle 19.

11. Applicant's arguments filed on page 9 of the "Remarks" section of the response filed March 28, 2006 with respect to the prior art of Petty as not disclosing the "second pump operable to be powered by DC power" have been fully considered but they are not persuasive. Though the Examiner concurs with Applicant that Petty teaches using a hydraulically-driven liquid pump, rather than expressly disclosing using an electrically driven liquid pump, it is the Examiner's position (as set forth above under paragraph 8 of this Office Action) that, at the time the invention was made, the choice of either hydraulic or electric power for driving a liquid pump would have been obvious based on art recognized equivalency.

It should again be noted that Applicant has not disclosed that using DC power, in lieu of other power sources, solves any stated problem or is for any particular purpose other than to power the pump for pumping the liquid from the storage tank.

12. Applicant's arguments filed on page 9 of the "Remarks" section of the response filed March 28, 2006 with respect to the prior art of Petty as not disclosing the step of "securing the second pressure washing wand to the first pressure washing wand to enable the second pressure washing wand to direct the spray of second liquid in a generally transverse direction relative to the high-pressure spray of the first liquid", as recited in claim 18, have been fully considered but

Art Unit: 3752

they are not persuasive. Applicant essentially contends that the Petty reference only discloses a single spray gun rather than two pressure wands, and Applicant further contends that, “it does not appear from a visual examination of Figure 6 of the Petty reference that either spray is directed in a generally transverse direction relative to the other spray”. It is the Examiner’s position that the wand assembly (13) shown by Petty comprises two distinct wand members (300, 301), secured together (see Figures 4 and 6), thereby reasonably anticipating a method step of securing the second wand to the first wand. Further, as defined in the online dictionary site, “Dictionary.com”, an accepted definition of the word “wand” is:

wand: n. A pipelike attachment that lengthens the handle of a device or tool

By this accepted definition, each of members 300 and 301 shown by Petty reasonably read on first and second wands.

Further, it is the Examiner’s position that Figure 6 of Petty does clearly show that the sprays from nozzles 19 and 250 are directed in a “generally transverse direction” relative to each other.

Conclusion

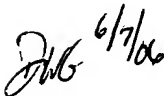
13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Darren W. Gorman whose telephone number is 571-272-4901. The examiner can normally be reached on M-F 7:30-5:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Dave Scherbel can be reached on 571-272-4919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3752

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Darren W Gorman
Examiner
Art Unit 3752

 6/7/06
DWG
June 7, 2006


David A. Scherbel
Supervisory Patent Examiner
Group 3700